



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW109-3130-85-133

Job Sheet 175893



003494

Part No: RBW109-3130-85-133

Job Qty: 1 ea

Part Name: Tool Kit, Tail Rotor Pitch Control Shaft Bearing Remove/Install



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/11/18

Job Tracking No:

Due Date: 5/25/18

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG RBW109-3130-85-133 Rev 1 IPP Rev 1 18.04.10 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	1 pcs		5/24/18	0.00	0.00	Purchasing		Chantal 18/05/23
110	Packaging	1 pcs		5/24/18	0.00	0.00	Packaging2		Chantal 18/05/23
120	QC	1 pcs		5/24/18	0.00	0.00	QC6		38
130	Small Fab	1 pcs		5/25/18	0.00	0.50	Small Fab-4		MLC 3-88 DAS
140	QC	1 pcs		5/25/18	0.00	0.00	QC5		38
150	Packaging	1 pcs		5/25/18	0.00	0.00	Packaging3-1		GAISS 18-08-30
160	QC21-FG	1 Ea		5/25/18	0.00	0.00	QC21		MAY 31 2018

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 39580 MANUFACTURE RBW109-3130-85-133 AS
Descriptions: PER DWG -Certificate of conformity is required

130 - 1-Engrave placard RB41011 using marktronic engraver 2-Transfer drill Dart placard RB41011 into Pelican case
APP-1490-E 3-Deburr holes and remove chips from case. 4-Rivet Dart placard to Pelican case 5-Glue placard RBW109-3130-85-133-17 to RBW109-3130-85-133 foam as per DWG. 6-Glue foam to case and pack case as per DWG.

MAY 09 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW109-3130-85-133P	Tool Kit, Tail Rotor Pitch Control Shaft Bearing Remove/Install	1 Ea (1 ea)	100-Purchasing	5073712
97524A032	Blind Rivet	4 Ea (4 ea)	130-Small Fab	5031249
APP-1490-E	Pelican case	1 Ea (1 ea)	130-Small Fab	5072430
RB41011	Dart Tooling Placard, Aluminum	1 Ea (1 ea)	130-Small Fab	5021040
RBW109-3130-85-133-11	Lid Foam	1 (1 ea)	130-Small Fab	5072432
RBW109-3130-85-133-13	Bottom Tool Cushion	1 (1 ea)	130-Small Fab	5072435
RBW109-3130-85-133-17	Tool Placard	1 Ea (1 ea)	130-Small Fab	5075350

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW109-3130-85-133P	1	0	0
130-Small Fab	97524A032	4	207	0
	APP-1490-E	1	0	0
	RB41011	1	930	0
	RBW109-3130-85-133-11	1	0	0
	RBW109-3130-85-133-13	1	0	0
	RBW109-3130-85-133-17	1	0	0



Container No: S073725



Part: RBW109-3130-85-133

Job No: 175893

Serial No/Batch: S073725

Revision: 1

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Howkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 05/23/18

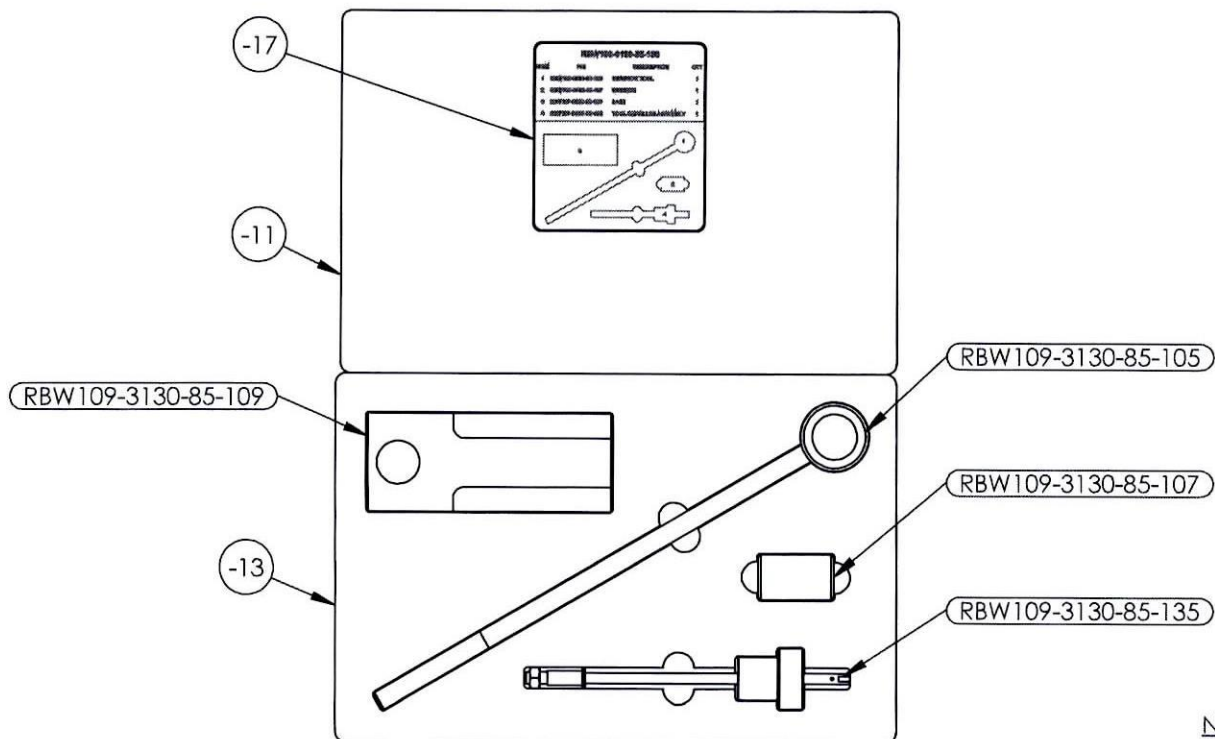
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88
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1
Part Specifications
Specifications could not be found.

Plex 4/11/18 1:42 PM dart.lavoie.chantal

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		RELEASED FOR PRODUCTION.	7/25/2016	RJC	JAG



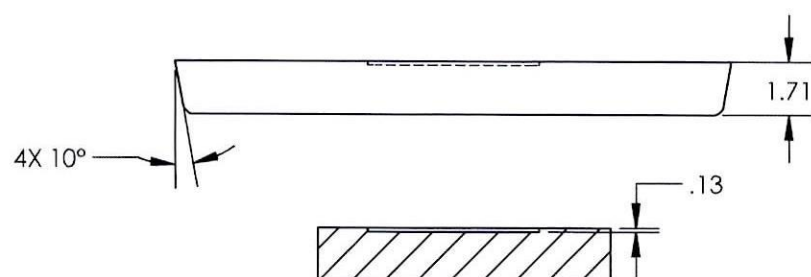
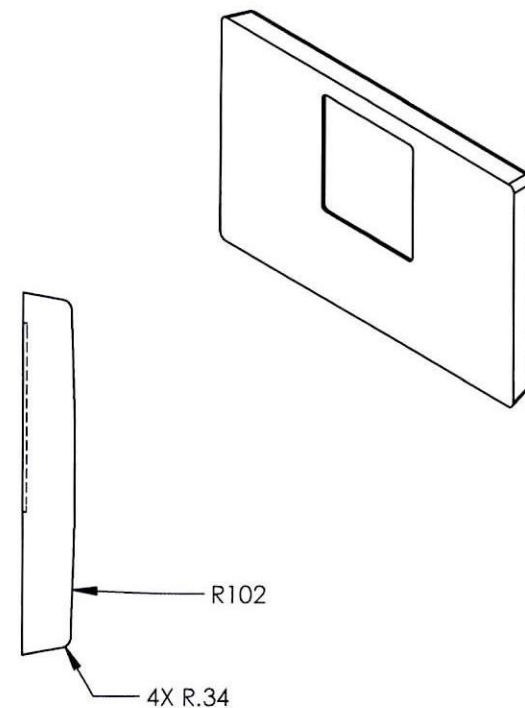
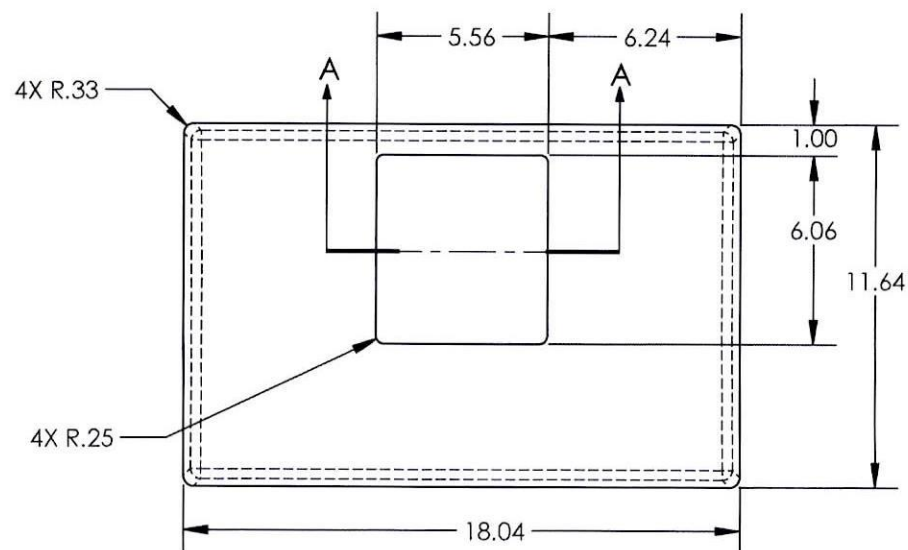
NOTE:
REF. AGUSTA T/N 109-3130-85-133.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	REACTOR TOOL		RBW109-3130-85-105	1
			-3	1	WRENCH		RBW109-3130-85-107	1
			-5	1	BASE		RBW109-3130-85-109	1
			-7	1	TOOL INSTALLER ASSEMBLY		RBW109-3130-85-135	1
		B/O	-9	1	CASE	PLASTIC	PELICAN CASE #APP-1490-E	N/S
		B/O	-11	1	LID FOAM	Y20, BLACK	1.71 X 11.64 X 18.04 (I.R. SPECIALTIES)	2
		B/O	-13	1	BOTTOM TOOL CUSHION	Y20, BLACK	2.64 X 11.85 X 18.21 (I.R. SPECIALTIES)	3
		B/O	-15	1	DART PLACARD	ALUMINUM	#RB41011	N/S
			-17	1	TOOL PLACARD	PLASTIC		4

DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTL	
DWG NO. RBW109-3130-85-133	REV 1
MAT'L	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH	.XX ± .01 ANGLES ± 5°
SPEC	.X ± .1 SURFACES = 125/✓
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AW119
SCALE 1:6	DATE 3/5/2015 SHEET 1 OF 4

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED



SECTION A-A

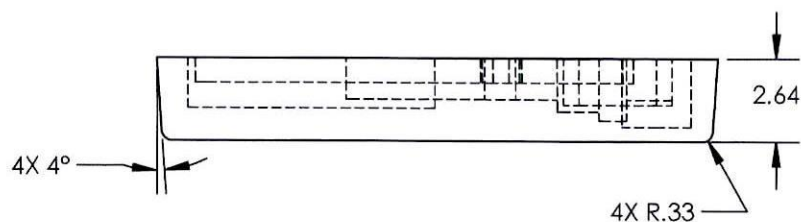
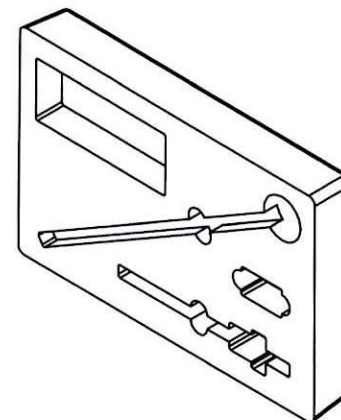
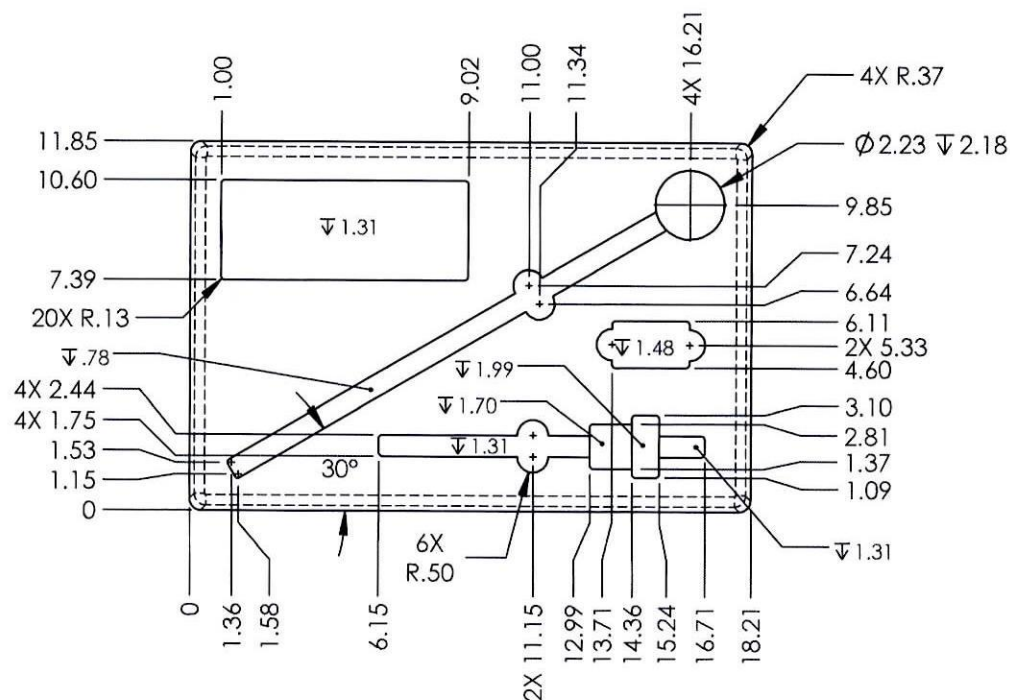
(-11)

LID FOAM

DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTL	
DWG NO. RBW109-3130-85-133-11	REV 1
MATL Y20, BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH	.X ± .1 SURFACES = 125/
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	AW119
APPROVED: GILBERT	
SCALE 1:6	DATE 3/4/2011
SHEET 2 OF 4	

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED



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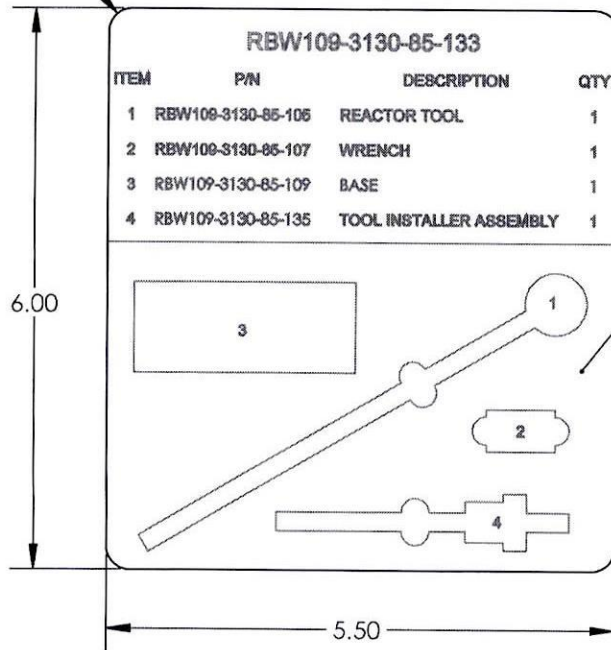
BOTTOM TOOL CUSHION

DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTR	
DWG NO. RBW109-3130-85-133-13	REV 1
MAT'L Y20, BLACK	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX $\pm$.010 FRACTIONS $\pm$ 1/8
FINISH	.XX $\pm$.03 ANGLES $\pm$ 1°
SPEC	.X $\pm$.1 SURFACES = 125/✓
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AW119
SCALE 1:6	DATE 3/4/2011
SHEET 3 OF 4	

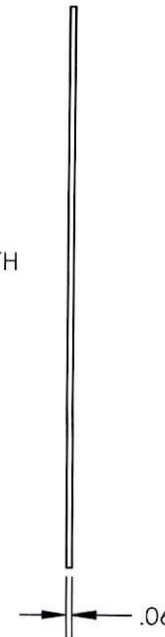
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REVISIONS			
REV	ECR	DESCRIPTION	DATE INITIAL APPROVED

4X R.25



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NOTE:
USE PDF.

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TOOL PLACARD

DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTL	
DWG NO. RBW109-3130-85-133-17	REV 1
MAT'L PLASTIC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125/
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AW119
SCALE 1:2	DATE 3/4/2011 SHEET 4 OF 4



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
PO039580

Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No:	PO039580
PO Date:	4/11/18
Due Date:	6/2/18
Purchase Order	
Revision:	
Revision Date:	
Ship-To Contact:	Phone:

REVISED

4

Ship To:

Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	RBEGM-745-064P			Removal/Installation- Motor Pump Cartridge (Forward Main Tank) WO 175829 AND WO 175826	Firmed	5/11/18	2 Ea	0 Ea	2 Ea	\$1,736.93/Ea	\$3,473.86
2	RBW109-3130-85- 133P			Tool Kit, Tail Rotor Pitch Control Shaft Bearing Remove/Install WO 175827 AND WO175893	Firmed	5/25/18	2 Ea	0 Ea	2 Ea	\$1,766.68/Ea	\$3,533.36
3	RBEL133M-6503- 101P			Mounting Tool	Firmed	5/18/18	2 Ea	0 Ea	2 Ea	\$1,753.73/Ea	\$3,507.46
4	RBD29828P			Elastomeric Bearing Removal Tool WO 175825	Firmed	6/4/18	2 Ea	0 Ea	2 Ea	\$551.91/Ea	\$1,103.82
5	RBW6305G00431- 3GP			Hoisting Flange Main Gear Box WO 175830	Firmed	5/29/18	4 pcs	0 pcs	4 pcs	\$1,013.90/pcs	\$4,055.60
6	RBE117-11181W1P			Main Rotor Drive Mounting Tool WO 175881, WO 175882, WO 175883 WO 175885	Firmed	5/11/12	4 Ea	0 Ea	4 Ea	\$2,603.98/Ea	\$10,415.92
7	RBW6305G00132- 3GP			AW139 Gimbal Bushing WO 175863, WO 175864, WO 175864	Firmed	5/29/18	3 pcs	0 pcs	3 pcs	\$1,080.39/pcs	\$3,241.17

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
8	RBEM632V1001101P			Main Gear Box Sling WO 175862 AND WO 175897	Firmed	5/9/18	2 Ea	0 Ea 2x	2 Ea	\$4,164.83/Ea	\$8,329.66
9	RBT18420P			Wing Pin Puller WO 175858	Firmed	5/25/18	2 Ea	0 Ea	2 Ea	\$1,159.85/Ea	\$2,319.70
Grand Total:											\$39,980.55

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 5/9/18 11:45 AM dart.lavoie.chantal



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No:039580

Dated: 5/22/2018

Our Order / Job No: 02AWT

Order Qty:2

Part Name:TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTALL

Part Number: RBW109-3130-85-133

Lot Size: N/A

Ship Date: 5/22/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBW109-3130-85-133

Rev: 1

Material Size and Type: (85-135)-1/6061 ALUM. -3/4140 Q&T STEEL; (85-105) -3,-5/4140 Q&T STEEL; (85-109) 6061 ALUM; (85-107) 4140 Q&T STEEL

Material Specifications: ALUM.: ASTM B221; STEEL: ASTM A108, ASTM A29

Heat Treatment: N/A

Plating/Finish: CLEAR ANODIZE: MIL-A-8625F, TYPE II, CLASS I; ZINC PLATE: ASTM B633, TYPE I, SC2

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 05/22/18

Signed: 

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com

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